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SUSTAINING BIODIVERSITY CONSERVATION IN AND AROUND NYUNGWE NATIONAL PARK (NNP)

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Assessment of the ANICO Program at Nyungwe National Park

June 5th – July 19th, 2013

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Executive Summary

This report considers two clusters of questions. First, is the ANICO program as it currently stands sustainable? And what can be done to improve its sustainability? Second, how should the program's performance be evaluated? What criteria can be used to assess the success or failure of the ANICO program? And what can be done to improve its prospects for success in the future?

Section 2 outlines the methodology we use in addressing these questions. Section 3 constructs a detailed "map" of the ANICOs' core responsibilities. Before we could address sustainability or success, we had to form an accurate understanding of the ANICO program as it now exists in practice. Our map shows four key areas of ANICO responsibility: (1) reporting illegal activities, (2) educating communities, (3) mediating conflicts, and (4) creating alternative livelihoods. In each of these areas, our map describes the range of activities that ANICOs undertake to perform their duties effectively. We discovered, however, that there is disagreement among ANICOs and staff members about whether mediating conflicts and creating alternative livelihoods should be part of the ANICOs' mandate.

Section 4 focuses on the question of sustainability. We suggest that there are three key dimensions to the ANICO program's sustainability. The first dimension is the selection process: unless the right people are chosen to be ANICOs, and unless they form clear and accurate expectations about their positions, the program will be in trouble from the very beginning. The second dimension consists of the incentives that motivate (or fail to motivate) ANICOs to perform well once they have been selected: unless ANICOs have adequate incentives, they will not perform well in the long term. The third dimension involves the funding and institutional support the program will need now and in the future.

In evaluating the selection process, we found that there is considerable variation from cell to cell, and that some of this variation produces poor results: in some cases, cell executive secretaries make unilateral decisions and choose ANICOs who do not meet the desired criteria. We also found that, starting with the selection process, ANICOs form a range of expectations about their position, not all of them realistic (see quotes on page 8). We therefore recommend that the selection process be standardized, that communities be involved in choosing new ANICOs, and that a RDB or WCS staff member participate in person to ensure the integrity of the process and to articulate clear and accurate expectations to new volunteers.

Our discussion of incentives forms the heart of this report. We begin by reviewing the obstacles and difficulties confronting ANICOs in their work. We then review the current incentives that exist to motivate them to work diligently and to remain committed to the position. We conclude that the existing set of incentives is, as a general matter, inadequate: unless they are strengthened, the program will see substantial attrition and underperformance over time. The key problem, in our view, is that ANICOs do not receive regular attention, recognition, and feedback from WCS or RDB. Fully half of the ANICOs we interviewed said that building relationships with park managers and other officials, and *becoming known*, were important incentives for them. Without regular contact and support, it is easy for ANICOs to feel isolated and relatively forgotten. And for volunteers working without pay, these feelings can severely worsen performance.

We offer a number of specific recommendations that would, in our view, help motivate ANICOs to perform well. In making these recommendations, we try not to lose sight of the limited resources and staff time available to WCS and RDB. We try to frame recommendations that are feasible—as much as possible—within these constraints. We recommend the following:

- Most importantly, WCS/RDB staff should hold regular, one-on-one meetings with ANICOs to discuss problems, review plans for the future, and go over the ANICOs' recent reports. We feel that these meetings would build stronger relationships between ANICOs and RDB/WCS and help the ANICOs feel valued as part of the team and motivated to perform well.
- ANICOs should receive feedback when they report illegal activity. When rangers follow up on these reports, ANICOs should be notified about the results. Knowing that their work has led to successful results will help motivate ANICOs to keep doing good work.

- ANICOs should be paid a small stipend to help them cover work-related costs, such as airtime and transportation costs incurred when visiting villages in their cell or when delivering written reports to WCS/RDB. Asking rural farmers to cover these costs themselves is, in our view, dispiriting.
- An annual or semi-annual celebration should be held to honor ANICOs' work, highlight best practices, and reward ANICOs who have performed especially well. These meetings, which could be combined with training sessions, would help ANICOs feel recognized and valued, and would also respond to the desire, stated by many ANICOs we interviewed, to learn from one another's work.

The third key dimension of sustainability is external funding and institutional support. Many of the staff we interviewed said that, if the program is to survive in the long term, it must eventually be handed over to RDB. To make this handover more likely, we argue that the ANICO program must be *delivering clear value* to RDB, and that this value must be *plainly visible* to government officials. The RDB staff we interviewed said that the ANICO program *is* delivering clear value, mainly in the information it provides about illegal activity in the park. Our interviews with cell executive secretaries also revealed that they value the ANICOs highly and that ANICOs help them do their jobs. But some interviewees also said that the program's value is not currently visible enough: since the ANICOs' own written reports are often vague and perfunctory, much of what the ANICOs do is undocumented. We therefore reiterate one of our previous recommendations: WCS/RDB staff should meet with ANICOs in person so that they can collect and record more detailed information about the ANICOs' activities and successes.

Section 5 of the report focuses on defining and measuring success. We return to the map outlined in section 2 and explore what success would mean, and how it could be measured, in each of the four core areas of ANICO responsibility. We also offer the following recommendations as to how the ANICOs' performance across these several areas could be improved:

- As suggested by RDB staff, ANICOs should work more closely with park rangers so that reports of illegal activity can be delivered more efficiently and so that they can learn the results of their reports. A joint training session could jump-start this collaboration.
- In cells that have long borders with the park, WCS/RDB should consider adding an extra ANICO. ANICOs often have trouble traveling long distances on a regular basis, so some villages are not well-integrated into the program.
- Data from ranger-based monitoring should be shared with ANICOs whenever possible to keep them up to date about threats to the park (and to apply pressure to ANICOs based in areas with high levels of illegal activity).
- RDB should carefully consider its decision to discontinue "consolation" payments for crops damaged by wild animals. A number of our interviews suggest that the national compensation law will prove ineffective at Nyungwe (see our analysis on pages 22-23). But the law's existence has raised expectations among farmers around Nyungwe, and if they are disappointed, it may not only damage park-community relations but also hurt the reputation of local ANICOs who have been helping farmers seek compensation under the new law.

Finally, we express some skepticism about the ANICOs' role in creating alternative livelihoods. Creating and overseeing a successful revenue-sharing cooperative requires a broad range of skills, including project design and management and proposal-writing, which are not easily taught in one-off, intermittent training sessions. In our view, training and supporting ANICOs in these activities would require a substantial new investment in capacity building and the hiring of new staff who specialize in community development. If WCS/RDB is unable to make this new investment, we recommend that the mandate for most ANICOs be narrowed, and that support for revenue-generating activities be limited to a small group of ANICOs who have shown the skill and initiative to succeed in this area.

1. Purpose

In the summer of 2013, we were asked by the Wildlife Conservation Society's Rwanda office to conduct an evaluation of the ANICO program around Nyungwe National Park. The key questions we were asked to investigate fall into two clusters: first, is the ANICO program as it currently stands sustainable? And what can be done to improve its sustainability? Second, how should the program's performance be evaluated? What criteria can be used

to assess the success or failure of the ANICO program as it now stands? And what can be done to improve its prospects for success in the future?

2. Methodology

In order to explore these questions, we conducted 26 interviews with ANICOs, local government officials (all of whom were executive secretaries of cells bordering the park), WCS staff, and Rwandan Development Board (RDB) staff. The following is a breakdown of the types of interviewees:

- 12 ANICOs
- 5 Cell executive secretaries
- 4 Current WCS staff members
- 1 Former WCS staff member
- 4 Current RDB staff members

All interviews were conducted between June 5th and July 19th, 2013. The average duration of each interview was around one hour, though some interviews ran as long as an hour and a half, and a few, because of schedule constraints, ran around a half hour.

The majority of these interviews—including all 12 of the ANICOs and all but one of the executive secretaries—were conducted in Kinyarwanda with the help of a translator. We worked with several translators: Claudine Tuyishime, Elie Musabyimana, Felix Mulindahabi, Esperance Mugiraneza, Christian Musafiri, and Ildephonse Kambogo, though Claudine Tuyishime was our translator most of the time. When our interviewees spoke strong English or French, we conducted the interviews in those languages without a translator.

Selection Criteria and Potential Sources of Bias

In choosing the ANICOs and executive secretaries to interview, we were constrained by distance, available transportation, and our translators' work schedules. We were therefore unable to use random sampling. Instead, we interviewed ANICOs and executives who worked in cells close to our office in Gisakura (within two hours of travel time), or who worked close to Kitabi and Kamembe, which we visited occasionally for WCS and RDB meetings.

Of the ANICOs we interviewed, 9 of the 12 received either a "good" or "very good" rating in the 2011-2012 performance report prepared by WCS. Of the remaining three, two were rated "fair" and one was rated "poor." So readers should bear in mind that the data we gathered from ANICOs disproportionately reflect the perspectives of ANICOs who are rated highly. Also, since much of our data come from ANICO self-reporting, a certain predictable exaggeration can be expected. We hope to have mitigated this source of bias by speaking at length with executive secretaries and staff supervisors.

We chose to interview WCS and RDB staff members based on their knowledge of or responsibility for the ANICO program. So we interviewed the staff members who work most closely with the ANICOs day-to-day, and the managers who bear responsibility for the program's present and future success.

In preparing this report, we have drawn from our detailed notes taken during these 26 interviews.

3. Overview of Core ANICO Responsibilities

Before we could conduct an accurate assessment of the ANICO program, we had to first understand the core responsibilities associated with the ANICOs' position. Rather than relying on printed documents, we felt we should instead construct a "map" of the ANICOs' responsibilities based on the understanding and activities of the key participants in the program: the ANICOs themselves, the executive secretaries they work with, and the WCS and RDB staff members who supervise them. In this way, we hoped to construct a map that corresponds more closely to the reality—the existing norms and practices—of the current ANICO program.

Our map of the ANICOs' responsibilities involves four key areas of responsibility, each of which contributes directly to the conservation mission of WCS and RDB:

- A. *Reporting Illegal Activities*
- B. *Educating Communities*
- C. *Mediating Conflicts**
- D. *Creating Alternative Livelihoods**

* Virtually all of our interviewees agree that A. and B. describe core areas of ANICO responsibility. There is disagreement, however, about C. and D.: not all interviewees describe these as core ANICO responsibilities; in fact, some interviewees claim that they are *not* part of the ANICO's mandate.

A. *Reporting Illegal Activities*

One of the central responsibilities of the ANICO is to report illegal activity that threatens the forest to park officials. Since RDB has limited presence in the communities around the park, they rely on information produced by community members, and the ANICOs form a key part of their information-gathering strategy. Without accurate and timely information about threats to the park, RDB cannot respond effectively and protect the forest.

The following activities enable the ANICOs to effectively report illegal activity:

- Cultivating a network of reliable “informants,” not only in their own villages but in other villages in their cell, especially those bordering the park. Some ANICOs report that these informants are ex-poachers or miners themselves and/or are community members currently benefiting from revenue sharing.
- Traveling regularly to other villages along the park boundary to develop and maintain personal relationships with informants, and in general to build trust in these communities.
- Delivering information quickly (typically over the phone) about imminent or ongoing threats to the park to WCS or RDB staff.
- Developing a working relationship with local officials who can help identify lawbreakers, enforce the law locally, and provide “cover” for the ANICOs when they report lawbreakers to RDB (so that they can avoid personal danger or retaliation).
- Conducting site visits, sometimes in conjunction with local government officials, to gather information about possible illegal activities.

B. *Educating Communities*

Educating local communities about the value of the park and about the laws protecting the park is another central ANICO responsibility. ANICOs form a key component of the long-term strategy to change community attitudes about Nyungwe National Park. In order to protect the park in the long term, it is important that local residents themselves come to appreciate both the value that the forest brings to their own communities and the risks involved in entering the park illegally.

The following activities enable the ANICOs to educate community members about the park:

- Participating regularly in community meetings, both at the village level and the cell level, during which they can deliver information about the park and the laws protecting it.
- Developing good working relationships with the local officials who convene the meetings and control the meeting agendas.
- Traveling to different villages in their cell to cultivate relationships with village officials.
- Meeting separately with people suspected of illegal activity in the park—either individually or in groups—to try to persuade them to change their behavior.
- Developing different messages for different groups: when addressing people suspected of illegal behavior, for example, ANICOs often emphasize the punishments associated with illegal use of the park and also draw attention to alternative economic opportunities that might substitute for illegal revenue.

Successful community education also enables the ANICOs to report illegal activities more effectively: community members who are convinced of the value of the park to their community—and who feel they benefit directly from it—are more likely to be willing to serve as informants.

C. Mediating Conflicts

Some ANICOs describe conflict mediation as an important part of their responsibilities. Two kinds of conflict are at issue: first, human-wildlife conflict, usually caused by animals from the forest raiding and destroying crops; second, conflict between the communities and park management. Some ANICO view themselves as mediators who can help find practical solutions and defuse anger in the community.

The following activities enable ANICOs to help mediate conflict in their communities:

- Visiting the site of human-wildlife conflicts and speaking directly with property owners about their problem.
- Communicating cases of human-wildlife conflict to park officials.
- Helping evaluate the extent of the damage to crops and other property (sometimes with the help of the executive secretaries).
- Coaching property owners about strategies for keeping animals away from their crops.
- Helping property owners file compensation claims, and sometimes negotiating compensation directly with park officials.

D. Creating Alternative Livelihoods

The fourth core set of ANICO responsibilities concerns the creation of alternative economic opportunities, mainly for people who currently resort to illegal activity in the park (poaching, tree cutting, mining, etc.). Many of our interviewees have emphasized the importance of alternative economic opportunities: people who resort to illegal activity in the park are often very poor and cannot afford to relinquish these activities unless they can find other ways of meeting their needs.

The following activities enable ANICOs to help create alternative livelihoods:

- Helping local residents form associations or cooperatives, assisting in the creation of these associations or cooperatives.
- Drafting proposals to win funding support for revenue-generating cooperatives, either from the public revenue sharing funds or from other potential donors.
- Providing management support and oversight for cooperatives once they're up and running.
- Providing technical support in the revenue-generating activity itself (for example, raising pigs or chickens, cultivating pineapple or passion fruit, administering small-scale loans, etc.)

It has also been proposed that ANICOs could help District level officials vet and select community projects for funding by the revenue-sharing program.

4. Sustainability of the ANICO Program

The question of sustainability in the ANICO system must be asked at several levels: First, is the program recruiting the right people to be ANICOs? Second, will the program be able to retain current ANICOs and motivate them to perform well in the years to come (that is, are the right incentives, motivations, and support systems in place)? Third, is the overall program itself sustainable: does it have the financial and institutional support necessary to keep it up and running from year to year? The first two levels concern the program's "internal" sustainability; the third concerns its "external" sustainability.

A. Internal Sustainability: The Selection Process

When a new ANICO is needed, WCS and RDB communicate their selection criteria to local government leaders at the cell level. Because of the distance and staff time involved, WCS and RDB staff do not typically participate in the selection of new ANICOs. The ensuing selection process varies from cell to cell. Three of the 5 cell executive secretaries we spoke with reported that their ANICOs were selected through elections held in community assemblies. One, the cell executive secretary of Gatere, reported that they selected their ANICO through a cell

committee meeting that also included village leaders. (The final cell secretary we spoke with was not present at the time of his ANICO's selection.) We have also heard through our interviews with RDB staff that some ANICOs are selected through a unilateral decision made by the cell executive secretary.

While WCS and RDB staff say they are satisfied with many of the appointment decisions made at the cell level, they also report problems. In some cases, the criteria supplied by WCS and RDB were disregarded, and cell executive secretaries chose relatives or friends, believing the ANICO position might open up future job opportunities for them. Some of these appointments resulted in ANICOs who were not well-suited for the position and needed to be replaced, which wasted time and resources.

Recommendation(1): Careful attention should be paid to designing a standard selection process that is most likely to yield ANICOs who meet the desired criteria. Local government officials' involvement in the selection of ANICOs is important, since they know community members well and since the ANICOs will have to be able to work with these same officials. However, some measure of community involvement may help ensure that the executive secretary doesn't simply appoint a friend or family member who does not meet the criteria. (So, for example, the executive secretary could nominate 3 to 5 candidates, and the community could then choose the candidate it prefers by election.) It is also possible that a community election—instead of a behind-the-scenes appointment by the cell secretary alone—would help ANICOs to feel that they have a clearer mandate from the community, giving them a greater sense of responsibility and pride. This form of appointment may also help make sure communities know *who* the ANICO is, as well as *what* the ANICO is supposed to do.

Choosing the right people is crucial to the long-term sustainability of the ANICO program. When the program was restarted, for example, it was thought that young people might make the best ANICOs, because they tend to be better educated and to bring greater energy and creativity to the program. While this may be true in some cases, there have been several problems with younger ANICOs. Most importantly, young people tend to be less settled than older, more established community members. They are more likely to leave the area for marriage, school, or job opportunities. When an ANICO leaves, he takes with him the time and resources invested in his training as well as the relationships he has built with the community and local government. Younger ANICOs may also have more trouble commanding the respect and attention of village leaders and elders.

Next, we believe that the initial communication with potential ANICOs is very important for later retention. It is essential that ANICOs start the job with a clear idea of their responsibilities, the obstacles they might face, and the time commitment involved. Ensuring the ANICOs have this information early in the process will help eliminate candidates who are not willing to commit to the job.

■ [When I first agreed to be an ANICO] I wasn't thinking I would have a lot of activities; but I have found that it's very time consuming. But because I agreed and I am committed, I don't have a problem with that.
ANICO, Bweyeye sector

ANICOs should be clearly aware of the responsibilities they are undertaking before time and resources are invested in their training. Two of the ANICOs we interviewed also said that they would like a more clearly defined work plan—a set of goals, activities, and targets decided between them and RDB, perhaps tailored to their particular cell and the kinds of challenges present there.

It is also very important that new ANICOs have realistic expectations about the benefits they will receive from their position. If their expectations—for example, of future employment stemming from their work with the ANICO program, or of rewards for good performance—are unlikely to be met, the program will suffer from their disappointment. They will lose motivation or quit their positions.

Consider these three excerpts from ANICO interviews:

■ I accepted with no expectation. But if I work well, maybe RDB will employ me or I will be rewarded.
ANICO, Bweyeye sector

■ Some ANICO have been promised jobs on various government projects—they've been told "if opportunities arise, you'll be first in line."

ANICO, Gatare sector

When we were first trained for the job, we were told we would not be paid. But we've seen many examples of other volunteers (in health, nutrition, or working for the Red Cross) who gained something in time—so there's hope for a long-term gain....When we are in training, ANICOs are given money for transport fees and other things; we're also told that if we work well, we'll get more in the future....I have the courage to continue because I hope that the people who appointed me are evaluating me in ways I don't know and see my good work.... For now, there's nothing I don't like about being an ANICO. But I would complain if I don't get anything in the future; if nothing comes of my good work—that is, if promises are not kept. If ANICOs do a good job, they should gain something.

ANICO, Bushekeri sector

We believe that understanding and managing expectations will be a critical to the retention of ANICO (and, by extension, to the program's sustainability).

Recommendation(2): WCS and RDB staff should consider sending a staff member to participate in person in the ANICO selection process. Since the selection process is such an important part of the program, it seems to us well worth the investment. The participating staff member could, first of all, help ensure that the selection process is sound, in keeping with **Recommendation(1)**. Second, he or she could take care to communicate clear and accurate expectations to the new ANICO—or to volunteers who have presented themselves for consideration—to avoid mistaken assumptions and hopes. At minimum, this could amount to a conversation with government officials at the start of the process, to make sure the criteria are clear, and a conversation with ANICO candidates, to make sure they fully understand the position before they commit. If staff time is unavailable, perhaps a trusted, successful ANICO from another cell could be sent to participate in the process instead.

B. Internal Sustainability: Incentives

In evaluating the sustainability of the ANICO program, it is necessary to ask: What currently motivates individual ANICOs to do this voluntary work? And what incentives could be provided as part of the ANICO structure to help retain and encourage ANICOs who work well? In order to answer these questions, we must first make note of the obstacles and difficulties that confront the ANICOs in their work.

Obstacles and Difficulties

The ANICO's work can be difficult and time-consuming. Some ANICOs we spoke with reported that they engage in daily activities—that they are always on call. Others said that they set aside between one and three days per week for visiting communities as part of their ANICO responsibilities. And as we discussed in section 3, they are called upon to perform a wide range of different tasks.

Moreover, ANICOs often have to use their own resources to cover costs. This was a recurring source of concern for the ANICOs we interviewed: some said that they had to pay for airtime to report problems to the park, to pay their own transportation costs when delivering reports to the cell office or visiting different villages within their cell, or to buy supplies for their work (e.g., extra paper for reports or even soda to reward informants).

Many of our interviewees emphasized problems with the submission of ANICOs' written reports. The expense of traveling delays submission, and some reports are lost as they are transmitted from the cell offices to the sector or district offices.

Since ANICOs report their neighbors to law enforcement, being an ANICO can also lead to strained relations with the local community. Several of the ANICOs we spoke with reported that they sometimes worry for their safety and that they try to submit lists of illegal users secretly, so people will not know who made the report. The law enforcement warden also told us that one ANICO's house was lit on fire by poachers in his community.

In the village, it's known that this is a volunteer position and that I am not actually employed. Community members also know that I am the one giving information to park management. So ANICOs fear for their safety. People do bad things to us.

ANICO, Bweyeye sector

When I first started, people got angry and just saw me as someone who was reporting people. After time, though, they're familiar with me—it took a lot of time explaining the value of the park to get people to change their attitudes toward me.

ANICO, Ruharambuga sector

Sometimes the community fears me—they think I am going to report them. I have to report people in a secret way (I inform local authorities who can follow up themselves)—I don't want the community to know that I'm the one who reported. I worry for my safety.

ANICO, Nkungu sector

Given these various difficulties, what currently motivates ANICOs to do their work?

Current Incentives

Almost all the ANICOs we interviewed said that their primary motivation was a commitment to conservation and park protection.

Before being an ANICO, I wanted to contribute in some way to park conservation, but I didn't have a formal role, so I didn't feel I had the right to say anything to the community. I feel lucky to be an ANICO because it gives me the opportunity to talk about the park.

ANICO, Bushekeri sector

For this ANICO and many others, the ANICO position is a source of legitimacy in the community and an opportunity to participate more actively in conservation. We do not doubt that many of the ANICOs we interviewed are motivated in large part by their commitment to the cause and their desire to do good work. However, given the time commitment and workload associated with being an ANICO, we also tried to dig deeper to understand the personal benefits an ANICO might receive from doing this work. In our interviews, the most commonly stated benefit of the ANICO position was the opportunity to build relationships with local government officials as well as RDB and WCS staff (6 of the 12 listed this as a primary motivation). Being an ANICO is a chance to be known and respected by important people—relationships that ANICOs hope may bring them benefits and opportunities in the future.

ANICO also list the following additional benefits:

- Increased status in their communities;
- Opportunities to be educated about the park (i.e., it is a learning experience);
- Training in valuable skills, such as proposal writing and project management;
- Transport fees when they attend meetings or trainings hosted by WCS or RDB (the amount given often exceeds their actual transportation costs—or ANICO opt to walk to the meeting and save the money—so they come home from the meeting with a little extra cash);
- The opportunity to visit the park and see chimpanzees.

Finally, there is the cooperative of ANICOs in Rusizi district that has started a poultry project with the help of revenue-sharing funds.

When we were first asked to prepare this report, we were asked to learn what incentives should exist to retain and motivate good volunteers. So the first question we should address is this:

Are the benefits we have just listed adequate in light of the obstacles and difficulties we summarized at the start of this section?

The answer to this question varies from one ANICO to another. ANICOs who are more deeply committed to park conservation, for example, require fewer tangible incentives to do their work well. The answer also depends on the scope of the ANICOs' responsibilities: the more ANICOs are asked to do, the greater the incentives that will be required to motivate them. In general, however, our answer is no: the current incentives are not adequate. Unless they are strengthened, the program will see substantial attrition and underperformance over time.

Given that so many ANICOs highly value the opportunity to develop relationships with park staff and other officials, it is essential that program managers take steps to ensure that ANICOs feel recognized and valued—that they feel like they are part of the team. If ANICOs feel instead that they are isolated and forgotten, or that WCS/RDB take their reports but do not really respect their time and effort, they are much more likely to lose patience with their position.

Supervision is also a problem: as a volunteer, if I don't see you often, I begin to lose interest. If I don't get feedback on my reporting, same. The only time they interact are when they're called for meetings or trainings. We need to reach out to them, not simply to call them in.... This is mainly a planning problem: we need to have a focal person who is solely in charge of the ANICO. The community conservation wardens are a little stretched.

RDB staff member

When three or four months pass without meetings, the amount of information transmitted from ANICOs decreases. Meetings have to be kept up regularly, but meetings are expensive ...

RDB staff member

Regular follow-up is lacking here at Nyungwe.... In Akagera, the relationships [with ANICOs] were better developed. Whenever there were park-wide events or meetings, the ANICOs were immediately invited and included. There was also regular follow-up: more meetings with the ANICOs.

RDB staff member

The ideal would be quarterly meetings of all ANICOs to discuss challenges and achievements. During those meetings, you would go over reports, talk about RDB follow up and what has been achieved. Again, there's need to provide psychological incentives by showing what has been accomplished.

WCS staff member

At present, not enough is being done to recognize the ANICOs' work. Training sessions and general meetings of all ANICOs are infrequent. WCS and/or RDB staff do not seem to visit ANICOs individually, on a regular basis, to discuss their problems, their reports, or their progress. ANICOs do not receive regular feedback or follow-up on their reports (either their phone reports or their written reports). The majority of the recognition and reinforcement that ANICOs presently receive comes from the cell executive secretaries who work with them regularly.

Currently turnover [among the ANICO] isn't too high, but the worry is that it will be (it has only been two years since the re-start of the program).

WCS staff member

Relatively simple measures can be taken to correct these deficiencies. These measures would require staff time and modest expense, but they would prove to be worthwhile investments, we believe, if WCS and RDB truly want the ANICO program to last. We realize that tight budgets (and limited staff time) may prevent management from pursuing all of these recommendations, so we list the most important and most cost-effective recommendations first.

Recommendation(3): WCS/RDB staff should meet individually with every ANICO on a regular basis to discuss problems, to review plans for the coming months, and to discuss the ANICO's recent reports. Regular meetings between an RDB or WCS staff member and individual ANICOs are, we believe, critical to the program's sustainability—in fact, we believe that this is the single most important recommendation we make in this report. One-on-one meetings would allow individual relationships to be built, and trust and goodwill developed, over time. They also would ensure that ANICOs feel valued by their managers. Finally, as we emphasize in the next section, they would enable more thorough data collection about

ANICOs' work and accomplishments. The quotations we provided earlier in this section show that RDB and WCS staff already understand the importance of regular meetings and relationship-building with their volunteers. It is now simply a matter of acting on this knowledge. We realize staff time is stretched and resources are tight, so these meetings should be arranged as much as possible to coincide with other activities (for example, if the team is participating in a school visit or is visiting a cooperative or attending a meeting, one staff member should also make time to meet with the local ANICO). Previous reports have recommended that a new RDB warden be hired specifically to oversee the ANICO program. If such a person were hired, he or she could be put in charge of these regular, one-on-one meetings.

Recommendation(4): Many ANICOs say they do the work because they care about conservation and want to contribute. It is important, therefore, that ANICOs be able to see the results of their good work. When ANICOs report illegal activity to the park, they should receive feedback about the actions that were taken as a result of their reports. They should know that their efforts have made a difference. This feedback would serve two purposes: it would remind the ANICOs that their work is making a real contribution to park protection and it would also communicate to the ANICOs that they are valued members of the team. Taking the time to make a phone call to follow up on a report is a sign of respect (and, conversely, not taking the time to follow up could be seen as a sign of disrespect). This could be more easily accomplished if the community conservation wardens also received feedback from the law enforcement team about reports that they forward. At present, to our knowledge, they do not receive such feedback.

Recommendation(5): Every ANICO should get a small stipend every year, to cover work-related expenses (airtime, transportation costs for delivering reports and visiting communities, supplies needed for performing their duties). It could be a fixed amount, so that ANICOs could then decide how to allocate the money most efficiently. The stipend would not necessarily cover all of the ANICOs' work-related expenses, but it would help to ensure that the position does not create undue financial burdens. In our view, asking ANICOs to cover work-related expenses using their own modest resources is discouraging and makes ANICOs feel overburdened and underappreciated.

Recommendation(6): Even though resources are limited, we believe that WCS/RDB should organize a regular celebration of the ANICOs' work (perhaps an annual or semi-annual event, which could be combined with the ANICO training sessions). Ideally, this would be a gathering of all ANICOs, where exceptional work would be celebrated and where ideas and strategies could be shared. Almost all of the ANICOs we spoke with told us they would appreciate more opportunities to meet with other ANICOs. We believe information-sharing is vital in this job, since it requires a great deal of innovation and initiative on the part of the individual. These meetings would serve several important functions. First, they would show the ANICO that WCS/RDB acknowledges and respects the work that they do. They would convey gratitude for the many hours ANICOs work (unpaid) for the protection of the park. Second, they would help motivate ANICOs by highlighting successes and providing evidence that ANICOs can make a difference. Third, these meetings might also provide a chance to commiserate with others working under similar conditions and to combat feelings of isolation that might discourage volunteers.

Recommendation(7): These regular celebrations would be strengthened if they were also coupled with some kind of prize or reward for the best ANICOs. The reward could be money, or it could be a trip (for example, the top ten performers for that year could get a trip to the Volcanoes National Park to see gorillas or to Kigali or Akagera). Several ANICOs and staff members have said that the promise of a prize or performance pay for ANICOs who perform well would help to motivate everyone.

In our conversations with ANICOs, staff and executive secretaries, a range of other suggestions were offered for improving the sustainability of the system, including the following:

- To help ANICO deliver their reports, they could collaborate with the "heads of zones" in the law enforcement department. Each of the officers supervises three or four ranger posts and has access to a motorcycle, so they could be made responsible for the collection of ANICO reports and their delivery to sector offices.
- An arrangement should be made so that the ANICOs can make free phone calls to government and RDB (perhaps a toll-free number).

- One ANICO per sector could be made responsible for collecting the reports from all of the other ANICOs in his or her sector and delivering them to the sector office. All of the ANICOs in the sector would rotate through this position.
- The reporting template could be revised and simplified, and ANICO could call in their reports, dictating them to a WCS staff member, who would type the report as the ANICO talks. It is possible that airtime for these phone calls would cost less than the transportation costs associated with report delivery (according to one staff member) and this might reduce the time ANICOs must spend delivering their reports. The key drawback to this proposal, in our view, is that it would consume a great deal of valuable staff time each quarter.
- ANICOs could be given preferential park access. For example, they and one guest would be allowed free access to park activities.
- Some ANICOs have requested bicycles to help them travel to communities or to submit reports.
- An alternative to the rewards described in **Recommendation(5)** would be a system of modest performance pay, which would pay a small amount of money for successfully completed tasks. For instance: a report of illegal activity that leads to an arrest would be rewarded with a small payment. We have learned that a similar system is currently used to reward health volunteers in Rwanda. There are potential disadvantages to this strategy, however: some of the ANICOs' responsibilities are long-term and difficult to separate into discrete tasks. For example, the community education mandate is a very important part of the ANICO's work, but it would be difficult to reward it effectively with performance pay without creating perverse incentives. If ANICO were rewarded for simply holding a certain number of community meetings, they would have an incentive to hold as many meetings as possible, regardless of the quality of information delivered or the need for repeated community gatherings. Performance pay could also cause ANICO to reallocate their time to favor discrete tasks that are rewarded and neglect longer-term projects. In other words, unless it is very carefully designed, a system of performance pay might create more problems than it solves.
- ANICOs could be grouped into district-level cooperatives. Together, they would decide on an income generating activity and then compete for a share of the revenue-sharing funds. Beyond generating revenue, these cooperatives would also provide a reason and opportunity for ANICOs to meet more regularly, and share ideas. This strategy is already being piloted in two districts. The main challenge so far is that the districts are large and it has been very difficult for ANICOs to travel to the site of the cooperative regularly. It might be more practical for ANICO cooperatives to be at the sector level (and perhaps cooperative meetings and the submission of quarterly reports could be done at the same time). There are two other concerns about this strategy: first, some staff members are concerned that the income generating activities associated with the cooperative will distract ANICOs from their volunteer activities, and second, if revenue-sharing money is truly intended for the very poor, ANICOs, who tend to be better educated and relatively stable financially, are not the target beneficiaries.
- ANICOs could be employed as advisors or "mentors" within local cooperatives (perhaps in cooperatives they themselves helped organize). A small portion of the cooperative's revenues could then be paid to the ANICO, who would be responsible for overseeing the operations of the cooperative and troubleshooting. This could also serve as an incentive for ANICOs to create new cooperatives.

The most vulnerable should be getting the revenue-sharing funds, but they ought to be organized by ANICOs....This way the ANICO will get respect for helping the community; the ANICO will help link the funding to conservation, making it clear to the cooperative members where the money comes from; and the ANICO will get resources through revenue sharing, which will serve as incentive....This deepens their attachment to the park.

RDB staff member

C. External Sustainability

ANICOs are currently trained and equipped by WCS. That is, when meetings or trainings are held, or equipment is supplied, the money comes from WCS grants. But what happens to the ANICO program if/when the WCS money runs out? RDB already collaborates closely with ANICOs, primarily through the community conservation wardens, but in order for the program's long-term survival to be ensured, government must eventually be willing to fund and support it. A firm commitment from government would not only render the ANICO program more stable and

sustainable in the long term, it might also supply additional funds for some of the incentives that we recommended in the previous section.

When we asked about an ideal long-term model for the ANICO program, several staff members described the current system for Rwanda's volunteer health workers, which is supported and funded by the Ministry of Health. Like ANICOs, volunteers are chosen from within the communities. They are trained in basic health care provision, but, unlike the ANICOs, they receive performance-based pay drawn from public funds.

How might government be persuaded to assume responsibility for the ANICO program? In our view, at least three conditions must be met. First, the program must be *clearly defined*: there must be consensus about the program's key objectives. Second, the ANICO program must be *valued* by government (especially RDB). And third, its value must be *visible* to key public officials. Since the first condition is self-explanatory, we focus on the second and third here.

Is the ANICO program valuable to public officials?

RDB staff members emphasized that community conservation is an important part of RDB's mandate—and that the ANICOs are a big piece of the community conservation strategy. ANICOs are also considered by the law enforcement warden to be key informants about illegal activities originating in the communities bordering the park. The law enforcement warden says that he receives reports from ANICOs roughly every two weeks.

In addition, all five cell executive secretaries we interviewed reported that they work closely with their local ANICOs and greatly value their work. All five also said that ANICOs make their job easier. Since conservation objectives are written into the executive secretaries' performance contracts, they value the ANICOs' conservation work. One cell secretary told us that conservation objectives have grown more important in recent years, and that they are now written into the performance contracts of village leaders as well. In some cells, the ANICOs participate regularly in the cell committee meetings, taking the lead on environmental questions and plans.

There's a strong collaboration between me and the ANICO. For every activity related to conservation, we do joint planning. The ANICO communicates to me about illegal activities. He has no official mandate for enforcement, so I go into the field to meet the illegal users and threaten them with fines....In our mandate, executive secretaries have to conserve the environment and the park. The ANICO is very helpful in this goal. He has more knowledge about the park because of his training and he can bring conservation expertise.

Cell executive secretary, Nkungu sector

[The ANICO] and I make joint plans to visit field sites. We sometimes go together to meet people suspected of poaching and marijuana growing. We talk to people about the importance of the park and warn them not to continue. We also help them join RDB cooperatives, such as the trail-building cooperative that's run out of Banda.

Cell executive secretary, Rangiro sector

Without the ANICO, my work would be more difficult. I would have to look out for the forest and do sensitization myself.

Cell executive secretary, Nkungu sector

The ANICO helps me do my own job. The park is a public resource. As the executive secretary, it's my job to protect public resources. So the ANICO helps me realize my own goals. Without the ANICO, it would be more difficult to protect the park....I don't agree with those who say that conservation isn't important to local government. In every annual budget, there's a sum dedicated to environmental protection. And for my cell, forest conservation is the key to environmental protection.

Cell executive secretary, Ruharambuga sector

The ANICO helps me a lot. We have a strong collaboration. Whenever he gets information about illegal activity or human-wildlife conflict, I am made aware. I get this information from the ANICO even before he reports it to the park....When he reports illegal activity, if he hasn't already gone to the site, then we go

together....I used to work as executive secretary in a different cell bordering Nyungwe, when the ANICO structure wasn't yet established. Now that I have an ANICO, my work is a lot easier. In the previous sector, I was in charge of everything related to park protection. But the rangers didn't always keep me informed—information would reach the sector office without my knowledge and this would create problems for me. The ANICO works closely with me and keeps me informed....He is a small miracle for me.

Cell executive secretary, Bushekeri sector

From what we have seen, ANICOs have demonstrated some value to RDB—especially through their reports of illegal activities and their role as conservation educators in their communities. However, it seems that it is the cell executive secretaries who work most closely with the ANICOs, and they repeatedly emphasized the value of the ANICOs in meeting local government's environmental goals. These executive secretaries might be an important resource of support to tap when the time comes to make the case for government funding for the ANICO program.

Is the value of the ANICO program *visible* to public officials?

At the moment, the program isn't big or strong enough to attract government investment. The goal is to strengthen the program to make it worthy of government investment later on. Information sharing is key. So much is being done on the ground: the meetings ANICOs are holding, their collaborations with local government, etc. Most of this information isn't making it to the top and it isn't being captured in the written reports. It's partly a matter of making the ANICOs' contribution more visible. We need a complete report more frequently and more field visits and observations of what ANICOs are doing. RDB staff should be collecting and compiling this information—this could perhaps come out of meetings with community conservation wardens.

RDB staff member

As the RDB staff member above makes clear, the ANICO program's value is not sufficiently visible to upper level public officials.

Recommendation(8): The RDB staff member's suggestion above links nicely with our main recommendation in the previous section: Regular, one-on-one meetings between RDB or WCS staff and ANICOs would not only boost morale and make ANICOs feel less isolated, but it would also provide an opportunity for staff members to collect detailed, in-depth accounts of what the ANICO has been doing and what changes he or she has brought to the community. This information will be vital in the long term, when it comes time to persuade government of the value and impact of the ANICO program. Thorough data collection now could help secure the program's sustainability down the road.

5. Defining and Measuring Success

We were asked to consider two main questions regarding the effectiveness of the ANICO program: What would it mean for the ANICO program to be successful? And what criteria might we use to measure this success? To address these questions, we now return to the four key areas of responsibility mapped in section 3. At the end of each subsection, we also include recommendations and further observations that might help improve the ANICOs' effectiveness.

A. Reporting Illegal Activities

The ultimate goal, in this area, is to protect the park by reducing the amount of illegal activity in it. ANICOs serve two primary functions in advancing this goal: (1) they transmit information to park management about illegal activities in their area, thus serving as the "eyes and ears" of park staff in their communities; (2) they deter illegal activity by threatening to report it and by educating communities about the laws protecting the park and the penalties associated with illegal behavior. Several ANICOs described changes in the behavior of illegal actors since they started their work: whereas people once went into the park at any time of day, they now go in only at night, in secret.

In order to measure the effectiveness of ANICOs in this area, managers should first evaluate the frequency and quality of each ANICO's reports of illegal activity. These are typically telephone reports, called in initially to the

community conservation wardens. High-quality reports are reports that are useful to law enforcement and lead to arrests or to the discovery of damaged sites in the forest. In order to evaluate these reports and observe trends, records must be kept every time a new report is called in.

Simply assessing the frequency and quality of ANICO reports is not enough, however. In areas where threats to the park have already been reduced, infrequent reports might be evidence of success, not failure. So the frequency and quality of ANICO reports should be assessed alongside existing data about illegal activity in the park. These data are already being collected through ranger-based monitoring and other sources, including local police, trackers, and guides (for instance, we heard from one guide that recent tree-cutting in Cyamudongo forest is threatening the integrity of the chimpanzee habitat). In areas in which threats to the park have been recently documented, ANICOs should be submitting frequent, high-quality reports. If they are not doing so, they should be considered ineffective.

One further complication should be kept in mind: some of the ANICOs' reports of illegal activity are never transmitted to the law enforcement warden. Some cases of suspected illegal activity are handled by the ANICO and the cell executive secretary themselves—they are not reported to RDB. Some cell executive secretaries told us that they only involve RDB when they cannot resolve the situation themselves. We also heard from ANICOs that they often warn illegal actors and try to persuade them to stop before reporting them to RDB. Some ANICOs will report illegal actors to RDB only after the second or third offence. This complication should reinforce our earlier observation that some of the ANICOs' work is not currently visible to managers.

Recommendations:

Recommendation(9): The law enforcement warden and other RDB staff members told us that ANICOs would be more effective if they collaborated more closely with park rangers on the ground (instead of waiting for their reports to filter from the community conservation wardens to the law enforcement warden and then back down to the rangers). Working more closely with rangers might also enable ANICOs to receive immediate feedback about the quality of their reports. This seems to us a promising idea; it may be worth investing in a joint training session for rangers and ANICOs to jump-start this collaboration.

Recommendation(10): It is sometimes difficult for ANICOs to travel regularly to other villages, especially when these are far away from their homes. Some staff members have expressed concern that ANICOs concentrate their efforts mainly in their own villages and do not often travel to the other villages that border the park in their cell. With these facts in mind, it may be worthwhile to appoint more than one ANICO in some cells. Some cells have much longer boundaries with the park than others, and the villages that are far from the ANICO may not be getting regular attention. This recommendation was also suggested by an executive secretary.

Recommendation(11): Previous reports on the ANICO system have stressed the need to share results of ranger-based monitoring with the ANICOs, so they have the latest information on the threats to the park in their area.

In order to make frequent telephone reports of illegal activity, ANICOs need steady airtime (see **Recommendation(5)**). Lack of paid airtime was a concern often cited by the ANICOs we interviewed.

Further observations:

- One cell secretary suggested ANICOs be trained in investigative techniques: how to collect information about illegal activities, how to cultivate a network of informants, how to conduct interviews, etc.

B. Educating Communities

The long-term goal of this area is to change community attitudes over time, thereby building support for conservation and reducing the threats to the park. In the short term, it is difficult to see tangible effects of education (since education is typically a gradual process), but there are ways to monitor both the quantity and quality of the ANICOs' efforts in this area.

As we mentioned at the beginning of the report, most ANICOs report two main activities related to education: (1) speaking about conservation at community-wide meetings, and (2) meeting individually or in small groups with suspected illegal actors. To evaluate ANICO performance, WCS/RDB managers could record how often each ANICO organizes or attends these meetings. To better judge the quality of each ANICO's contributions in this area, managers could also attend a meeting where the ANICO is scheduled to speak and/or interview cell executive secretaries or other officials who attend these meetings. A great deal can be learned through in-person observations: Is the ANICO an effective speaker (i.e., when he or she speaks, are community members paying attention?)? Is the information delivered accurate and well-chosen?

WCS/RDB can also collect information about the effectiveness of community education by informally interviewing some community members to gauge their knowledge about the park: can they speak to the value of Nyungwe? Are they aware of the uses of revenue-sharing funds in their district? Are they aware of the laws protecting the park? And finally, have they seen any evidence that illegal actors have stopped their illegal activities after the ANICO's interventions?

Finally, public attitudes in cells bordering Nyungwe could be compared with public attitudes in cells not bordering the park, where no ANICO exists. One executive secretary who had worked in several cells reported that he thought public attitudes in his current cell (bordering the park) were substantially more favorable to conservation, in large part because of the education work of the ANICO and other local officials. This is not, of course a perfect measure of the ANICOs' effectiveness, since other actors (conservation NGOs, local officials) are also likely to be more active in delivering conservation messages in cells bordering the park.

Further observations

- The ANICOs' education mission is related to their law enforcement mission. As we explained earlier, ANICOs rely on informants to generate information about illegal activities in the park. Some ANICOs we interviewed explained that informants are often people who have benefited from conservation in some way or who have come to believe in the value of conservation. Therefore, ANICOs' capacity to report illegal activity effectively depends partly on their success in educating communities about the value of the park.
- Several ANICOs told us that they would benefit from more opportunities to visit Nyungwe, to learn more about the park's biodiversity, and to better understand and appreciate its value. Indeed, it seems important to us that these spokespersons for conservation have strong, firsthand knowledge of what they are talking about.

C. Mediating Conflicts

Human-wildlife conflict (i.e., crop raiding by wild animals) can exaggerate local resentment of conservation, thereby impeding the long-term goal of improving relations between communities and the park. It is therefore important to ensure that cases of crop raiding are addressed in a consistent, fair, and timely manner by park officials. ANICOs assist in this process by reporting cases of crop raiding to park officials and often by being the first on the scene (sometimes accompanied by the cell executive secretary) to assess the damage and talk with the farmer whose crops have been damaged. In some cases, they also work with farmers to help them protect their crops from future raids. Since the new national compensation law was ratified, ANICOs have also been helping farmers whose crops have been damaged to fill out the forms required to apply for government compensation.

For the ANICO to be effective in these areas, it must be widely known in the community that the ANICO should be notified of cases of crop raiding. If this information is not widely known, many cases of conflict are likely to go unreported. ANICOs should also make consistent and timely reports to RDB when they receive information about crop raiding. ANICOs should possess accurate information about effective strategies for crop protection. And they should be capable of filling out compensation forms appropriately.

To measure an ANICO's effectiveness in these activities, WCS/RDB could speak with the cell executive secretary and also with people whose crops have been damaged, to get a sense of whether people are satisfied with how the ANICO has handled cases of crop raiding, and to evaluate the strategies the ANICO has conveyed to farmers about crop protection. WCS/RDB could also speak with farmers who own property adjoining the park, to make sure they understand that the ANICO can help them when their crops are damaged by animals. And WCS/RDB could ask for

copies of the ANICO's compensation forms, to ensure that they are adequate. As was the case with the reporting of illegal activities, it is possible that some cases of crop raiding are handled solely by the ANICO and the executive secretary, and are never reported to the park. If this is indeed the case, the number of crop raiding incidents and the ANICOs' work in this area are currently underreported.

Further observations and recommendations:

- There is some disagreement about what exactly the ANICOs' role should be relative to human-wildlife conflict. Many ANICOs believe they are responsible for visiting the site of the damage, "calming down" the farmer, helping farmers fill out forms for possible future compensation, and talking to communities about strategies for protecting their crops in the future. The chief park warden and the law enforcement warden, however, told us that the ANICOs' role is to immediately report damage to park staff and to educate communities about the compensation law and about how best to protect their crops. They said ANICOs should not visit the scene of crop damage on their own, but should wait to go with the official group of RDB staff and police.
- If ANICOs are and will continue to be the first people on the scene, however, RDB may want to make sure it has communicated clearly with the ANICOs about what messages it would like delivered to the farmers. For instance, it is important that the ANICO does not create unrealistic expectations about the compensation policy—expectations that, if unfulfilled, may lead to greater resentment of the park in the future.
- In any context, the implementation of compensation policies can be very delicate. The designers of the policy have to be careful that compensation does not create perverse incentives (i.e., that it is designed in such a way that will not encourage people to be more careless in guarding their crops or otherwise deliberately exploit the policy). In addition, it is very important that the policy works consistently, fairly and in a timely manner, or it might actually increase resentment toward conservation. (For example, we have read about a government compensation policy in India in which, after farmers took the time and effort to file a complaint, it could take weeks or even months for an official to come and investigate the site, by which time all evidence of the damage would be gone.) We do not have many details about the new compensation policy for Nyungwe, so our comments here are somewhat speculative, but we have heard several things that give cause for concern about the policy's applicability in this context. First, we have heard that this policy was designed for Akagera, where large animals (elephants and cape buffalo) cause severe damage to crops and even take human lives. In Nyungwe, however, we have been told that most damage is relatively small, caused by baboons or vervet monkeys. One ANICO told us that most of the damage in her area was valued under 20,000 Rwf, and that it is therefore not covered by the current compensation policy. We have also been told that damage caused by Vervet monkeys is also not covered under the policy.

Recommendation(12): If these reports are true (see above bullet point), and if many of the incidents of damage that occur around Nyungwe are therefore not covered under the compensation law, RDB may want to reconsider its strategy. We have been told that RDB has discontinued its own practice of paying modest "consolation" sums to farmers around Nyungwe whose crops have been destroyed by wild animals. If the national compensation law turns out to be either ineffective or inapplicable to most incidents at Nyungwe, RDB should strongly consider restarting its own consolation payments. Now that the compensation law has raised farmers' hopes, the failure to receive any payment will lead to frustration and resentment. This frustration may damage the ANICOs' reputations, since they now find themselves in the difficult position of "middle men" trying to facilitate the compensation process.

D. Creating Alternative Livelihoods

In almost all of our conversations about the conservation of Nyungwe, people have stressed the importance of alternative livelihoods. How can you expect people to stop harvesting resources from the park if no economic alternatives exist? The ultimate goal in this area is to reduce threats to the park by providing alternative sources of income to people who currently depend on the park for firewood, for bushmeat, or for other essentials.

ANICOs are trying to contribute to this goal in several ways. Most of the ANICOs we interviewed are working to group illegal users into cooperatives or savings schemes. Some are also writing funding proposals on behalf of these

cooperatives, to attract support from revenue-sharing funds or other sources, and helping manage cooperatives that are up and running. Some have designed the new cooperatives themselves.

Evaluating the ANICOs' effectiveness in this area is complicated. First, the cooperative itself must be evaluated. In order to be successful (from the point of view of park conservation), a revenue-generating cooperative must achieve several goals:

- It must generate steady revenue for a reasonable number of participants.
- The revenue generated must be adequate to replace—or mostly replace—the revenue derived from illegal activity.
- The members who receive the revenue (and contribute to the cooperative's work) must be poor villagers who currently depend on the park's resources—so the cooperative must be targeted to reach the right people. If the cost of joining the cooperative is too high, for example, the poorest villagers will not be able to join.
- Steps must be taken to prevent cooperative members from continuing to exploit the park's resources illegally.

The information needed to evaluate cooperatives could be gathered through detailed conversations with cooperative members and by conducting audits of the cooperative's books.

Furthermore, the ANICO's own contribution to the cooperative must be evaluated. This could be accomplished by speaking to members of successful cooperatives to find out who is mostly responsible for the cooperative's success, and what the ANICO's role has been. An interview with the ANICO him- or herself may also prove useful: ANICOs who are deeply involved with successful cooperatives will be able to speak in detail about the cooperative's functioning. Data can also be collected about the number of cooperatives the ANICO has assisted, and the success rate and quality of the ANICO's funding proposals.

Our interviews have left us somewhat skeptical, however, about the ANICOs' capacity to be effective in this area. For more details about this, see our further observations below.

Further observations and recommendations:

After all of our conversations with ANICOs, cell secretaries, and staff, we still find it very difficult to explain how most cooperatives actually work or to judge their effectiveness. For example, one ANICO described a beekeeping cooperative with over 60 members, all of whom were once engaged in illegal activities. Yet, when we tried to dig for more information, we discovered that only a small fraction of the members were active beekeepers. We were unable to find out whether the other members were working or benefiting at all. In other cases, we discovered that the cooperatives ANICOs described to us have yet to receive an initial investment from RDB—so, illegal users have been grouped together, but they are not currently working—they are simply waiting for funding.

The difficulty we had in gathering precise information about these cooperatives made us skeptical about many of them. Moreover, as one RDB staff member warned, cooperatives that are poorly run may simply create false expectations that lead to disappointment and a return to illegal activities.

On the other hand, we were sometimes able to get detailed information suggesting that some cooperatives function successfully. For example, ANICOs and staff spoke positively about the trail-building cooperative in Banda, where ex-poachers are hired and paid to work on trails. Also, we were able to learn more details about the small savings associations that have started in some areas. For example, the ANICO in Buvungira helped illegal users to join a savings association. Each of the members contributes a small sum of money (maybe just 200 Rwf) at a time and then small loans are made available upon request. At the end of the year, the association's money is used to fund Christmas and New Year's celebrations (a time when many people would otherwise go into the park to supplement their incomes). The cell secretary in Buvungira spoke highly of this scheme. From our perspective, these savings schemes have a number of advantages: (1) they don't require external support from RDB or other funders, (2) they don't require a great deal of specialized training, and (3) they have the potential to benefit all members.

Several staff members in RDB and WCS told us that they could imagine expanding and deepening the ANICOs' involvement with the cooperatives. In addition to their work in helping to organize and bring members into the

cooperatives and writing revenue-sharing proposals, the ANICOs could serve a greater advisory role to the cooperatives, helping provide the financial and the technical support that they need to succeed, or to secure this support from outside experts and trainers. ANICOs would monitor the cooperatives, detect problems before they become serious, and help find solutions.

The staff members who discussed this possibility also envisioned that some money, drawn from the cooperatives' revenues, could be set aside as a small salary or payment for the ANICOs. These staff members are well aware that many ANICOs are not currently qualified to fulfill the role envisioned above, and that a great deal of training and capacity-building would need to take place first. Some even say that if ANICOs become more involved, as managers or overseers, with the cooperatives, they will need to be offered a formal salary.

So, what skills do the ANICOs need to create alternative livelihoods successfully, and what skills do they need in order to be effective mentors and advisors to revenue-generating cooperatives, now and in the future? First, the ANICOs must be able to develop a sound idea for a revenue-generating scheme that is well adapted to the needs and capacities of his or her particular community—especially to the capacities of illegal actors in the community. Second, the ANICOs must be able to identify potential funding sources and write successful funding proposals. Third and most importantly, ANICOs would need to be skilled project managers, managing both people and money. And finally, they must be savvy enough to connect the cooperative with the outside technical expertise and assistance it needs to produce marketable products or services.

In our view, however, it is unrealistic to expect that most ANICOs will develop these skills without a very substantial investment in capacity building. We are convinced that creating alternative livelihoods is a critical component of effective, long-term conservation at Nyungwe. We also believe that many ANICOs might *want* to participate in the development of these alternative livelihoods, because this service helps balance their role in the community, so that they are seen as bringing concrete benefits to their fellow community members, not just threatening to report them to park officials. It is surely easier to approach an illegal actor and warn him or her not to enter the park if you are also able to offer that person an alternative. But we doubt that most ANICOs can learn to handle this role effectively through the occasional, brief training sessions that WCS currently offers. These concerns were echoed by two RDB staff members, including the chief park warden, who argued that creating alternative livelihoods should not be part of the ANICOs' mandate.

When we asked ANICOs what kinds of training they need to do their jobs better, many of them said they needed to develop skills in proposal writing and small project management. In our view, successful capacity-building in this area would require more than just one-off training sessions. It would require, for instance, the presence of permanent staff who are specialists in community development and who could do regular site-visits and follow-up with the cooperatives and the ANICOs who supervise them.

We also agree with the staff who said that ANICOs would need greater incentives to motivate them to work as project supervisors or extension officers.

The question, then, is whether WCS/RDB should take on the additional costs associated with additional capacity building and additional incentives. This is a question that we are not well-positioned to answer. We will, however, offer the following recommendations:

Recommendation(13): If WCS/RDB is unwilling to substantially increase its investment in capacity building, we recommend that the mandate for most ANICOs be narrowed to exclude creating alternative livelihoods, and that resources be focused on enabling ANICOs to perform well across a narrower range of tasks. As we already pointed out, the principal value that ANICOs currently deliver to RDB come from their reports of illegal activity, and more can be done to improve ANICO performance in this area. Asking ANICOs to do too much with too few resources may lead to an overall decline in effectiveness. In short, given current constraints, resources should be invested only where they can be expected to have a real impact.

However, we think that the money currently used to train all ANICOs in proposal writing and project oversight could instead be devoted to a smaller, select group of ANICOs. Instead of stretching limited resources to try to make every ANICO a project manager and advisor for cooperatives, WCS/RDB could

provide focused, ongoing training and support to a few, dedicated ANICOs who have shown the energy and capacity to be effective in this area, and who have good ideas for revenue-generating projects. (Though other ANICOs could still be involved in helping connect illegal users with existing cooperatives in their cells.) We feel more confident that funds invested in this way would deliver results.

Recommendation(14): However, if WCS/RDB is willing and able to substantially increase its investment in capacity building, we suggest that they consider hiring permanent community development staff who could be made responsible for the development of revenue-generating cooperatives and the provision of regular training and support to the ANICOs who work with them.

E. Concluding Thoughts About ANICOs' Effectiveness

We want to end with a two general thoughts about the effectiveness of the ANICO program.

First, we would like to return briefly to our primary recommendation in the Sustainability section (**Recommendation(3)**). In our view, one-on-one meetings between ANICO and WCS/RDB staff would also help make ANICOs more effective on the ground. Management could use these meetings to identify and solve problems that arise in ANICOs' work, to help prioritize responsibilities, and to jointly develop plans and strategies. They would offer valuable opportunities for on-the-ground supervision and support.

Second, two of the executive secretaries we spoke with requested that they be included in the ANICO trainings so that they can participate more effectively in conservation activities. This recommendation was also echoed by one RDB staff member. If sufficient funds are available, it may be worth considering this idea, as a way of reinforcing the ANICOs' relationship with local government and making executive secretaries feel more invested in the activity of conservation. If executive secretaries do not tend to stay in their positions for long, however, it may not be worth investing in them as long-term partners.